ESA Listed Salmonids Checklist / Mitigation Strategy Form
required for
Flood Damage Reduction (construction) Projects

Ecology has provided the "ESA Listed Salmonids Checklist / Mitigation Strategy Form" as part of the 2001-2003 application packet for FCAAP construction projects. This checklist was designed to help project proponents and government agencies identify when a project needs further analysis regarding adverse effects on ESA (Endangered Species Act) listed salmonids. Salmonids are salmon, trout and chars, e.g. bull trout. For these purposes, "ESA listed salmonids" is defined as fish species listed as endangered, threatened or being considered for listing. Any construction project with potential impacts to salmonid species listed under the ESA will require completion of this form to document how identified impacts will be mitigated. Failure of an applicant to disclose impacts, or demonstrate adequate mitigation for impacts, will result in delays or disqualification for funding. This checklist must accompany application Parts 1, 2, and 3 in order to be considered for FCAAP funding.

Applicant Information

Jurisdiction:
Contact: Phone: E-mail:

Project Information

Project Title:
Project Location:

Has the proposed project been reviewed by either of the following agencies?

US Fish and Wildlife Service Yes ☐; No ☐
National Marine Fisheries Service Yes ☐; No ☐

Project Description:

If ESA listed species are present or ever were present in the watershed where your project will be located, your project has the potential for affecting them, and you need to comply with the ESA. Analysis of the downstream and upstream impacts of a project is necessary to assure that all mitigation needs are addressed and that the systemwide impacts of site-specific measures are accounted for with appropriate mitigation. The questions in this section will help determine if the ESA listings will impact your project.

The Fish Program Manager at the appropriate Department of Fish and Wildlife (DFW) regional office can provide information for the following two questions:

1. Are ESA listed salmonids currently present in the watershed in which your project will be located? Yes ☐; No ☐
   Please describe:

2. Has there ever been an ESA listed salmonid stock present in this watershed? Yes ☐; No ☐; Uncertain ☐
   Please describe

If you answered "yes" to either of the above questions, you should complete the remainder of this checklist.

PROJECT SPECIFICS: The questions in this section are specific to the project and vicinity.

3. Name of watershed:

4. Name of nearest waterbody:

5. What is the distance from this project to the nearest body of water?
   ➔ *Often a buffer between the project and a stream can reduce the chance of a negative impact to fish.*
6. What is the current land use between the project and the potentially affected water body (*parking lots, farmland, etc)?*

7. 4. Is the project described above a:
   - natural permanent barrier (waterfall) Yes ☐; No ☐
   - natural temporary barrier (beaver pond) Yes ☐; No ☐
   - man-made barrier (culvert, dam) Yes ☐; No ☐
   - other (explain):

8. If yes, are there any resident salmonid populations above the blockage? Yes ☐; No ☐; Don't know ☐

9. What percent of the project will be impervious surface (including pavement & roof area)?

FISH MIGRATION: The following questions will help determine if this project could interfere with migration of adult and juvenile fish.
➔ *Both increases and decreases in water flows can affect fish migration.*

10. Does the project require the withdrawal of:
    Surface Water? Yes ☐; No ☐
    Amount:
    Name of surface water body:
    Ground water? Yes ☐; No ☐
    Amount
    From where
    Depth of well

11. Will any water be rerouted? Yes ☐; No ☐
    If yes, will this require a channel change?

12. Will there be retention or detention ponds? Yes ☐; No ☐
    If yes, will this be an infiltration pond or a surface discharge to either a municipal storm water system or a surface water body?
    If to a surface water discharge, please give the name of the waterbody.

    (Note: Per Chapter 86.26 .090 RCW, "Funds from the flood control assistance account shall not be available for maintenance of works or structures maintained solely for the detention or storage of flood waters.")

13. Will this project require the building of new roads? Yes ☐; No ☐

➔ *Increased road mileage may affect the timing of water reaching a stream and may impact fish habitat.*

14. Are culverts proposed as part of this project? Yes ☐; No ☐

If yes, describe the changes.

15. Will topography changes affect the duration/direction of runoff flows? Yes ☐; No ☐

16. Will the project involve any reduction of the floodway or floodplain by filling or other partial blockage of flows? Yes ☐; No ☐

If yes, how will the loss of flood storage be mitigated by your project?

WATER QUALITY: The following questions will help determine if this project could adversely impact water quality. Such impacts can cause problems for listed species. Water quality can be made worse by runoff from impervious surfaces, altering water temperature, discharging contaminants, etc.

17. Do you know of any problems with water quality in any of the streams within this watershed? Yes ☐; No ☐

If yes, describe.

18. Will your project either reduce or increase shade along or over a waterbody? Yes ☐; No ☐

➔ R*emoval of shading vegetation or the building of structures such as docks or floats often result in a change in shade.*

19. Will the project increase nutrient loading or have the potential to increase nutrient loading or contaminants (fertilizers, other waste discharges, or runoff) to the waterbody? Yes ☐; No ☐

20. Will turbidity be increased because of construction of the project or during operation of the project? Yes ☐; No ☐

➔ *In-water or near water work will often increase turbidity.*

21. Will your project require long term maintenance, i.e. bridge cleaning, highway salting, chemical sprays for vegetation management, clearing of parking lots? Yes ☐; No ☐

VEGETATION: The following questions are designed to determine if the project will affect riparian vegetation, thereby, adversely impacting salmon.

22. Will the project involve the removal of any vegetation from the stream banks? Yes ☐; No ☐

    If yes, please describe the existing conditions, and the amount and type of vegetation to be removed.

23. If any vegetation is removed, do you plan to re-plant? Yes ☐; No ☐

    If yes, what types of plants will you use?

NOTE: Most applicants should have the information necessary to answer most of the questions in this checklist. Additional information will need to be obtained by local and state agencies if it appears that the project is likely to affect ESA listed species.

Mitigation Strategy for ESA Impacts

The above checklist identifies potential impacts or problems relating to endangered species. The Applicant must address mitigation for these impacts. Mitigation can be demonstrated through a combination of design, permitting, monitoring techniques, etc. Please see the example for project mitigation on page 5.

Project mitigation:

RESOURCES

Washington Department of Fish and Wildlife Website
www.wa.gov/wdfw/
This site has useful information on fish habitat.

Washington Department of Ecology Website
www.ecy.wa.gov
Click on the Water Quality button on the left side of this page.

National Marine Fisheries Services Website
Evolutionarily Significant Unit (ESU) maps can be found at
www.nwr.noaa.gov
Click on the Endangered Species Act (ESA) links to view the ESU maps and other information.

Example: Project Mitigation

Example: A riverbank at a curve in the river has experienced severe erosion with risk of losing a main arterial road (historically built) near the river. Alternative road locations may be an option for the future. At this time it is hoped that a carefully planned and accomplished bank stabilization effort will be able to protect the road while maintaining river dynamics. The proposed project will involve temporary rerouting of the channel. Potential ESA impacts for the project include impact to the riparian zone, disruption and loss of habitat, sediment loading, and increased turbidity. (Fall spawn timing for the fish in this river occurs after September 30).

Response: ESA mitigation efforts include:

- channel work to be conducted during low-flow window (August 15 to September 30 – see HPA permit attached);
- three groins installed in the river per attached construction plans to slow the velocity of flood waters and provide migratory resting areas for fish;
- large woody debris, large boulders, toe rock installed at or below the Ordinary High Water Mark along the toe of the bank to improve character, variety, and complexity of in-stream habitat opportunities for salmonids and other aquatic organisms;
- installation of soil-vegetative systems (brush mattresses and geogrid layers) in the river bank, above the Ordinary High Water Mark to re-establish vegetated river bank; re-plant area with native trees, shrub and herbaceous species to provide habitat. In addition, an associated site one-hundred feet upstream of the bend will have riparian vegetation re-established in conjunction with the bank stabilization project. The attached plan includes specifications for this riparian restoration work.
- monitoring for the presence of ESA listed Salmonids will be conducted prior to and during construction to assure no listed fish are being impacted by the construction work. Site vegetation, and upstream riparian restoration will be monitored for 5 years to assure successful re-vegetation (see attached monitoring plan).